## WHAT IS CLAIMED IS:

- 1. A scintillator panel comprising a radiation-transparent substrate, a flat resin film formed on said substrate, a reflecting film formed on said flat resin film, and a scintillator formed on said reflecting film.
- 2. A scintillator panel according to claim 1, wherein at least a part of said scintillator is covered with a transparent organic film.
- 3. A scintillator panel according to claim 2, wherein said transparent organic film covers over the all surfaces of said scintillator.
- 4. A scintillator panel according to claim 3, whereinsaid transparent organic film reaches to the surfaces of said substrate.
- A radiation image sensor comprising a radiation-transparent substrate, a flat resin film formed on said substrate, a reflecting film formed on said flat resin film, a scintillator formed on said reflecting film, and an imaging device disposed so as to face said scintillator.
- 7 %. A radiation image sensor according to claim 5/, wherein at least a part of said scintillator is covered with a transparent organic film.
- A radiation image sensor according to claim %, wherein said transparent organic film covers over the all

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surfaces of said scintillator.

8. A radiation image sensor according to claim 7, whereinsaid transparent organic film reaches to the surfaces of said substrate.

A method of making a scintillator panel comprising steps of:

forming a flat resin film on a radiation-transparent substrate;

forming a reflecting film on said flat resin film; and

forming a scintillator on said reflecting film.

10. A method of making a scintillator panel according to claim 9, further comprising a step of covering at least a part of said scintillator with a transparent organic film.

11. A method of making a scintillator panel according to claim 12, wherein said transparent organic film covers the all surfaces of said scintillator.

12. A method of making a scintillator panel according to claim 11, wherein said transparent film reaches to the surfaces of said substrate.

A method of making a radiation image sensor comprising steps of:

forming a flat resin film on a radiation-transparent substrate;

forming a reflecting film on said flat resin film;



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forming a scintillator on said reflecting film; and disposing an imaging device opposite said scintillator.

A method of making a radiation image sensor according to claim 1, further comprising a step of covering at least a part of said scintillator with a transparent organic film.

16. A method of making a radiation image sensor according to claim 14, wherein said transparent organic film is covering the all surfaces of said scintillator.

16. A method of making a radiation image sensor according to claim 15, wherein said transparent film reaches to the surfaces of said substrate.

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